

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 March 2004 (25.03.2004)

PCT

(10) International Publication Number
WO 2004/025670 A1

(51) International Patent Classification⁷: **H01B 3/00, 3/18**

(21) International Application Number:
PCT/US2003/028491

(22) International Filing Date:
10 September 2003 (10.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/409,566 10 September 2002 (10.09.2002) US

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ,
DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, YU, ZA, ZM,
ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: POLYPROPYLENE CABLE JACKET COMPOSITIONS WITH ENHANCED MELT STRENGTH AND PHYSICAL PROPERTIES

(57) Abstract: The present invention is a cable comprising one or more telecommunication or power transmission media or a core of two or more such media, each medium or core surrounded by at least one jacketing or sheathing layer comprising a polypropylene homopolymer or copolymer and having a relaxation spectrum (RSI) and melt flow (MF) such that $RSI \cdot MF^a$ is greater than about 12 when a is about 0.5. Significantly, the jacketing or sheathing layer exhibits advantaged extrusion fabrication characteristics, resulting from the propylene polymer having enhanced rheology properties (as demonstrated by its high relaxation spectrum index (RSI)). Additionally, the propylene-based polymer composition of the present invention exhibits relatively high melt strength compared to compounds of conventional propylene polymers or ethylene polymers. In fiber optic cable jacketing applications, the present invention advantageously balances low post extrusion shrinkage with high modulus/deformation resistance.



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